



Clarke County and the Towns of Berryville and Boyce

Water Source Overview

Major sources include the Shenandoah River, Prospect Hill Spring, and groundwater wells.

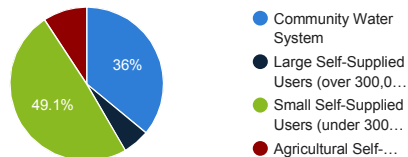
***Table 1:** Reported (2010) and projected (2040) water use by system type for Clarke County in MGD

Type	Reported Use 2010 MGD	Projected Use 2040 MGD
Community Water System	0.470	0.830
Large Self-Supplied Users (over 300,000 gal/month)	0.074	0.112
Small Self-Supplied Users (under 300,000 gal/month)	0.642	0.980
Agricultural Self-Supplied Users	0.121	0.121

Water Use by System Type

Approximately 8,556 people use private groundwater wells for residential water supply. All tables and graphs represent reported water use including Sales to other localities, if applicable.

***Figure 1:** Percentage of reported water use by system type in 2010 (No use data shown on graph if less than .01 MGD: Refer to Table 1)



***Figure 2:** Disaggregated water use percentages for Community Water Systems in 2010 (No graph shown if no disaggregated use data reported)

***Table 2:** Reported (2010) and projected (2040) groundwater and surface water use for Clarke County in MGD

Reported 2010 Groundwater Use (MGD)	Reported 2010 Surface Water Use (MGD)	Projected 2040 Groundwater Use (MGD)	Projected 2040 Surface Water Use (MGD)
0.75	0.56	1.10	0.94

***Figure 3:** Clarke County highlighted in the Commonwealth of Virginia



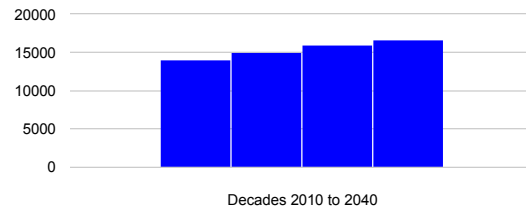
Projected Water Demand

Population and demand are projected to increase through the planning period. Existing water sources are expected to meet projected demands.

***Table 3:** Clarke County population projections by decade from 2010 to 2040 (data gathered from VEC projections - 05/20/13)

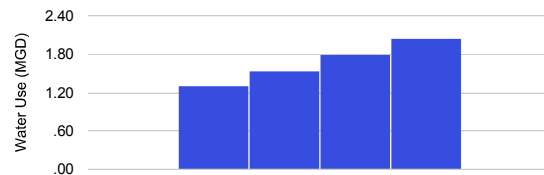
2010	2020	2030	2040	% Change (2010-2040)
14,034	15,025	15,871	16,631	14.3%

***Figure 4:** Clarke County population projections by decade for 2010, 2020, 2030 & 2040



***Table 4 & Figure 5:** Clarke County water demand trends by decade for 2010, 2020, 2030 & 2040 in MGD

Reported Use 2010 MGD	Projected Use 2020 MGD	Projected Use 2030 MGD	Projected Use 2040 MGD	Percent Change (2010-2040)
1.31	1.55	1.80	2.04	56.4%



Drought Management Practices

The localities adopted ordinances for the implementation and enforcement of the Drought Response and Contingency Plan. (Northern Shenandoah Regional WSP)